MAY 01 2002

162120

510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

This summary of safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21CFR, Part 807, Subpart E, Section 807.92.

A. Submitter's name, address, telephone number, initial importer, contact person

1. Manufacturer of the subject device

Name & Address of Manufacturer; Olympus Optical Co., Ltd.

2-3-1 Shinjukuku Monolis Nishi-Shinjuku

Shinjuku-ku, Tokyo, 163-0914

Japan

Registration Number:

Address, Phone and Fax

810047

of R & D Department

2951 Ishikawa-cho Hachioji-shi, Tokyo 192-8507

Japan **Endoscope Division**

TEL 81-426-42-2891

FAX 81-426-46-5613

2. Initial Importer

Name:

Olympus America Inc.

Address:

Two Corporate Center Drive Melville, NY 11747-3157

TEL 516-844-5688 FAX 516-844-5416

3. Name of Contact Person

Name:

Tsuyoshi Yanai

Regulatory Affairs Manager, Olympus Optical Co., Ltd.

Address, Phone and Fax:

2951 Ishikawa-cho

Hachioji-shi, Tokyo 192-8507

Japan

TEL 81-426-42-2891 FAX 81-426-46-5613

B. Device Name, Common Name

1. Common/Usual Name

Ultrasonic endoscope

2. Device Name

Ultrasonic Bronchofiberscope OLYMPUS BF TYPE UM40

3.Classification Name

	FR Number	Product Code	Class
Endoscope and accessories	876.1500	KOG	II
Diagnostic Ultrasound Transducer	892.1570	ITX	II

C. Identification of the predicate or legally marketed device

The following devices information demonstrates that this device is substantially equivalent to a legally marketed, predicate medical device.

Device Name	#K
EUS EXERA Ultrasonic Gastrovideoscope OLYMPUS GF TYPE UM160	K011886
Olympus UM-2R/3R Ultrasonic Probes and associated	K982323
ancillary equipment (for bronchial use)	
BF-240/P240/1T240 Bronchovideoscope & Accessories	K963033
Bronchoscope BF-N20	K910423

D. Device Description

1. Summary

This subject device has been designed to be used with an OLYMPUS endoscopic ultrasound center, light source, documentation equipment, display monitor, endotherapy accessories and other ancillary equipment for endoscopic ultrasonic imaging of the upper airways and trancheobronchial tree.

2. Design

This subject device is designed to comply with the standards listed below.

IEC 60601-1	
IEC 60601-1-1	
IEC 60601-1-2	
IEC 60601-2-18	-
CISPR11	

3. Materials

The material for Insertion Tube Outer Surface of this subject device has a new patient-contacting material. The biocompatibility test reports of the new material show that the new material is safe for its intended use.

E. Intended Use:

The intended use of this subject device, as defined by FDA guidance documents, is:

Other

1)Intraluminal ultrasound for upper airways and tracheobronchial tree

F. Technological Characteristics:

This device operates identically to the predicate devices in that the transducer of the endoscope that is inserted into the body cavity mechanically scans the targeted site. The piezoelectric material in the transducer is used as an ultrasound source to transmit sound waves. Sound waves are reflected back to the transducer and converted to electrical signals that are processed and displayed as images.

Technological Characteristics of this device is identical to the predicated devices identified in item C.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

MAY 01 2002

Olympus America, Inc. % Mr. Donald James Sherratt Medical Stream Director Interek Testing Services 70 Codman Hill Road BOXBOROUGH MA 01719

Re: K021204

Trade Name: Olympus BF Type UM40 Ultrasonic Bronchofiberscope

Regulation Number: 21 CFR 892.1570

Regulation Name: Diagnostic ultrasonic transducer

Product Code: 90 ITX

Regulation Number: 21 CFR 876.1500

Regulation Name: Endoscope and accessories

Product Code: 78 KOG Regulatory Class: II Dated: April 15, 2002 Received: April 16, 2002

Dear Mr. Sherratt:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the Olympus EU-160 EUS EXERA and EU-M30 Endoscopic Ultrasound Centers, as described in your premarket notification:

Transducer Model Number

BF Type UM40

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration Center for Devices and Radiological Health Document Mail Center (HFZ-401) 9200 Corporate Boulevard Rockville, Maryland 20850

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801, please contact the Office of Compliance at (301) 594-4591. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597 or at its Internet address "http://www.fda.gov/cdrh/dsmamain.html".

If you have any questions regarding the content of this letter, please contact Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,

Nancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

4.3.1 Indications for Use Form for Ultrasonic Bronchofiberscope OLYMPUS BF TYPE UM40

Diagnostic Ultrasound Indications for Use Form

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

		Mode of Operation									
Clinical Application	Α	В	м	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)	
Ophthalmic											
Fetal											
Abdominal											
Intraoperative (specify)		<u> </u>				,					
Intraoperative Neurological											
Pediatric	1							0 1 10			
Small Organ (specify)											
Neonatal Cephalic											
Adult Cephalic											
Cardiac	T									•	
Transesophageal	T										
Transrectal											
Transvaginal											
Transurethral											
Intravascular											
Peripheral Vascular											
Laparoscopic			·								
Musculo-skeletal				1							
Conventional											
Musculo-skeletal				-	.						
Superficial											
Other (specify) Note1 N= new indication; P= pre	لـــــا	N									

Additional Comments:
Note1: Specification for "Other"
Intraluminal ultrasound for upper airways and trancheobronchial tree.

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON	ANOTHER PAGE IF NEEDED)
	Concurrence of CDRH, Office of Device Evaluation (ODE)
Prescription Use (Per 21 CFR 801.109)	•
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(Division Sign-Off)
Division of Reproductive, Abdominel, and Radiological Devices
510(k) Number K02-1204

4.3.1 Indications for Use Form For Olympus EU-M60 EUS EXERA ENDOSCOPIC ULTRASOUND CENTER With Olympus GF Type UM40 Ultrasonic Endoscopic Transducer

Diagnostic Ultrasound Indications for Use Form

Intended Use of new transducer: Intraluminal ultrasound for upper airways and tracheobronchial tree

	1					Mode o	f Operation			-
Clinical Application	A	.В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (Specify)	Other (Specify)
Ophthalmic										
Fetal										
Abdominal										
Intraoperative (specify)										
Intraoperative Neurological										
Pediatric										
Small Organ (specify)										
Neonatal Cephalic .										
Adult Cephalic										
Cardiac	 									
Transesophageal		Р								
Transrectal		Р								
Transvaginal	†	Р								
Transurethral	1	Р								
Intravascular										
Peripheral Vascular	 									
Laparoscopic		<u> </u>								
Musculo-skeletal Conventional										
Other (specify)		Р								

N= new indication; P= previously cleared by FDA; E= added under Appendix E

Additional Comments:	Olympus EU-M60 EUS EXERA Endoscopic Ultrasound Center Previously cleared for use for
Intraluminal ultrasound for	upper airways and tracheobronchial tree under K011886
Specification for "Other"	: Gastrointestinal tract, biliary, pancreatic duct and surrounding organs,
	upper airways and tracheobronchial tree, urinary tract,
female reproductive tract.	
	EASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)
	Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)
Division of Reproductive, Abdominal, and Radiological Devices
510(k) Number

4.3.1 Indications for Use Form For Olympus EU-M30 ENDOSCOPIC ULTRASOUND CENTER With Olympus GF Type UM40 Ultrasonic Endoscopic Transducer

Diagnostic Ultrasound Indications for Use Form

Intended Use of new transducer: Intraluminal ultrasound for upper airways and tracheobronchial tree

						Mode o	f Operation							
Clinical Application	Α	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (Specify)	Other (Specify)				
Ophthalmic														
Fetal														
Abdominal														
Intraoperative (specify)														
Intraoperative Neurological														
Pediatric														
Small Organ (specify)														
Neonatal Cephalic														
Adult Cephalic														
Cardiac														
Transesophageal		Р												
Transrectal														
Transvaginal														
Transurethral														
Intravascular														
Peripheral Vascular														
Laparoscopic														
Musculo-skeletal Conventional	1													
Other (specify)	1	Р												
N= new indication; P= previously	cleare	d by l	FDA;	E= add	ed unde	r Appendi	хE							

Additional Comments: Olympus EU-M30 Endoscopic Ultrasound Center Previously cleared for use for Intraluminal ultrasound for upper airways and tracheobronchial tree with transducer UM 2R/3R under K982323

Specification for "Other": Gastrointestinal tract, biliary, pancreatic duct and surrounding organs. Cleared under K982323

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Reproductive, Abdominal,

and Radiological Devices
510(k) Number

K021204